

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Assignee: Arcaris, Inc.

Inventors: Carl Alexander Kamb, et al

Application No: 09/259,155

Filed: February 26, 1999

For: PROCESS FOR IDENTIFICATION OF
GENES, PERTURBAGENS AND
CELLULAR TARGETS RELATING TO
VIRAL GROWTH AND DISEASE

Group Art Unit: 1655
Examiner: Jeffrey N. Fredman

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SUPPLEMENTAL PRELIMINARY AMENDMENT

Sir:

This is a preliminary amendment to **Application No. 09/259,155**. On February 18, 2000, the Examiner issued an Office Action, and on August 15, 2000 Applicant filed a Response and Amendment. Applicant's representative discussed the case with the Examiner on November 6, 2000. Claims 1-9, 11 and 13 are pending.

AMENDMENT

Please CANCEL claim 5.

Please AMEND the claims as follows:

1. (Twice Amended) A method for identifying a proteinaceous perturbagen that inhibits viral growth-related cell death, comprising the steps of:
 - (a) introducing a library of [perturbagen encoding] nucleic acids, each library member encoding a perturbagen within a scaffold structure, into a population of host cells;
 - (b) expressing the encoded proteinaceous perturbagens within said scaffold structure in said population of host cells;

- (c) exposing said perturbagen-bearing host cell population to a virus;
- (d) selecting for growth-proficient cells; and
- (e) recovering from said growth-proficient cells a sublibrary of nucleic acids encoding perturbagens that confer inhibition of viral growth-related cell death.

2. (Reiterated) The method of claim 1, wherein said step of selecting for growth-proficient cells comprises detecting cells that are not productively infected with said virus.

3. (Reiterated) The method of claim 2, wherein said step of detection comprises detection of non-fluorescent cells.

4. (Reiterated) The method of claim 1, wherein said step of selecting for growth-proficient cells comprises a stringent selection for growth.

5. (Cancelled) [The method of claim 1, wherein said proteinaceous perturbagen is expressed in a scaffold.]

6. (Amended) The method of claim [5] 1, wherein said scaffold is non-fluorescing GFP.

7. (Reiterated) The method of claim 1 wherein said virus is selected from a group consisting of rhinovirus, reovirus, influenza virus, adenovirus, human immunodeficiency virus, human papilloma virus, hepatitis virus and herpes virus.

8. (Reiterated) The method of claim 7 wherein said virus is human immunodeficiency virus.

9. (Amended; reiterated) A method for identifying a cell proliferation gene or gene fragment that inhibits viral growth-related cell death, comprising the steps of:

- (a) introducing a library of putative cell proliferation genes or gene fragments into a population of host cells;
- (b) expressing said library in said population of host cells;
- (c) exposing said library-bearing host cell population to a virus;
- (d) selecting for growth-proficient cells; and
- (e) recovering from said growth-proficient cells a sublibrary of cell proliferation genes or gene fragments that confer inhibition of viral growth-related cell death.

11. (Amended; reiterated) A method for identifying a cellular target involved in viral growth within a cell, comprising the steps of:

- (a) exposing in a protein interaction assay (i) a perturbagen obtained by the method of claim 1 to (ii) a population of putative cellular targets obtained from said growth-proficient cells; and
 - (b) identifying a cellular target that interacts with said perturbagen.
13. (Amended; reiterated) The method of claim 11, wherein said step of identifying comprises a yeast two-hybrid interaction assay.

CONCLUSION

Applicant requests that the Examiner enter and consider favorably the claims as amended and submitted herein.

Please address all TELEPHONIC communication to Laura A. Handley, the undersigned attorney of Arcaris, Inc., at (801) 303-0304.

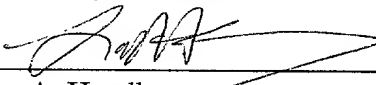
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Respectfully submitted,

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